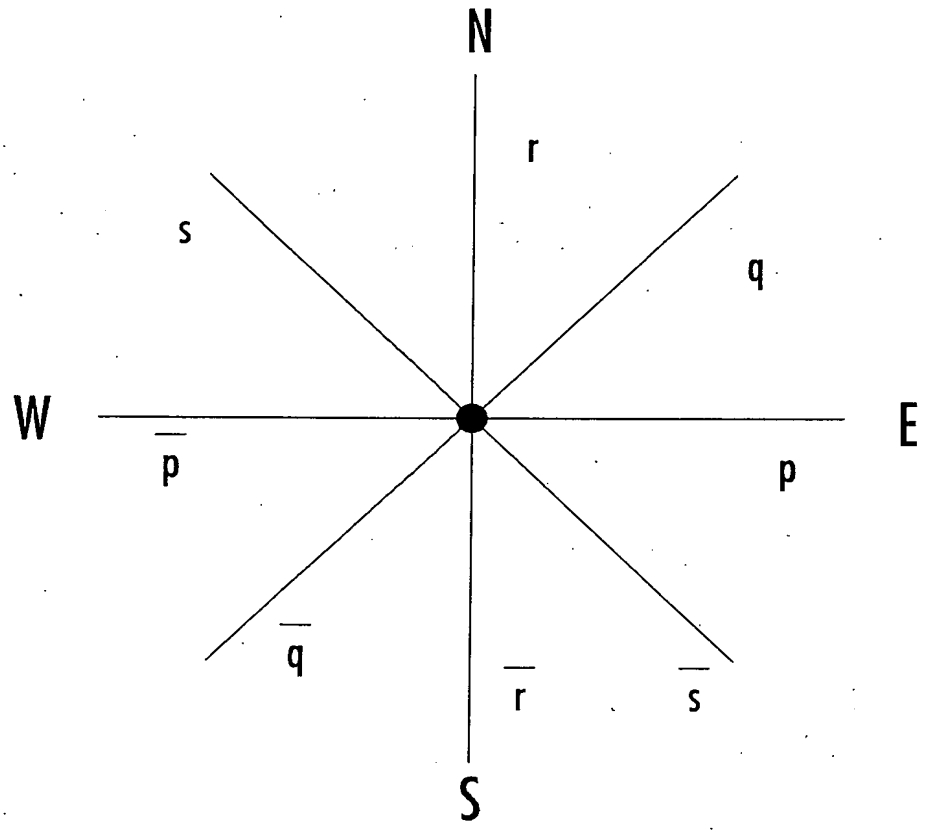

FIG. 1

Step 1

[-p(qr-s v q-r-s)] v p-q-rs v {p[q(r-s v -r-s v –rs]}

Represent Schema in vector notation

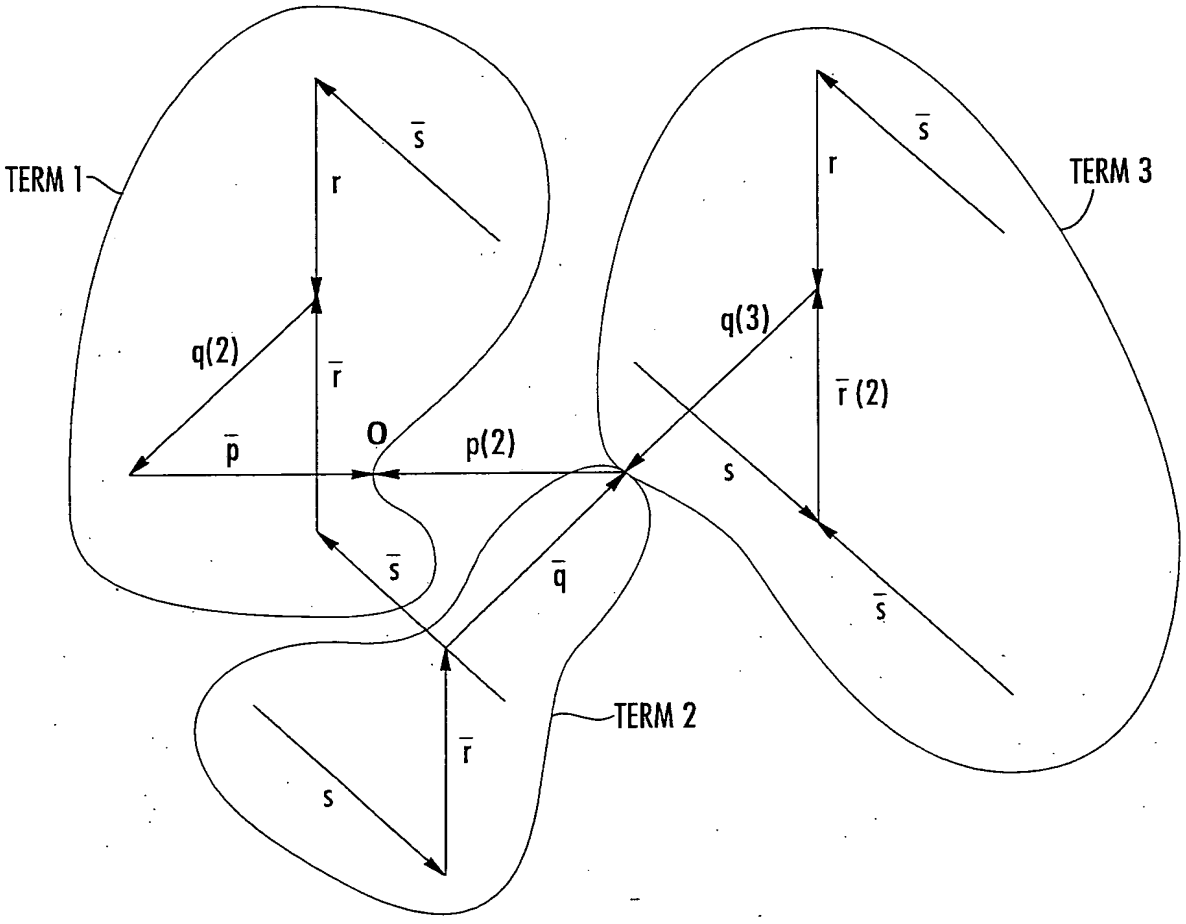

FIG. 2

Step 2

[-p(qr-s v q-r-s)] v p-q-rs v {p[q(r-s v -r-s v –rs]}

2. Find greatest symmetry about an opposed couple p, -p

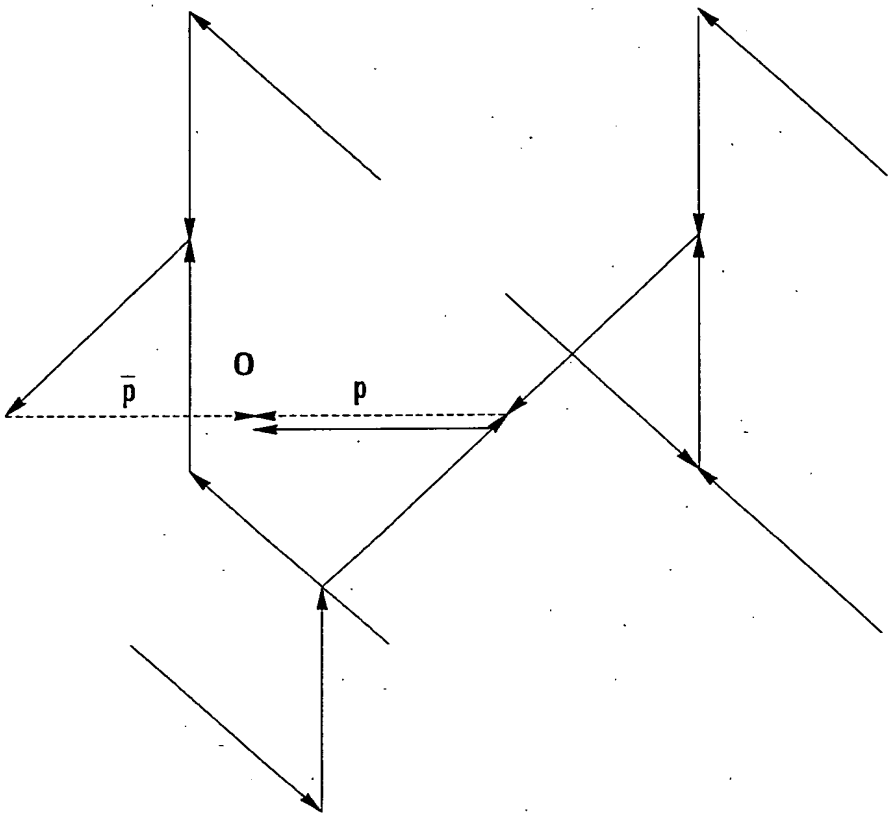

FIG. 3

Step 3

[p(qr-s v q-r-s)] v p-q-rs v {p[q(r-s v -r-s v –rs]}

3. Delete the couple, superimpose the symmetries, and delete resulting redundancies. Keep multiple paths (e.g. pq-rs) open.

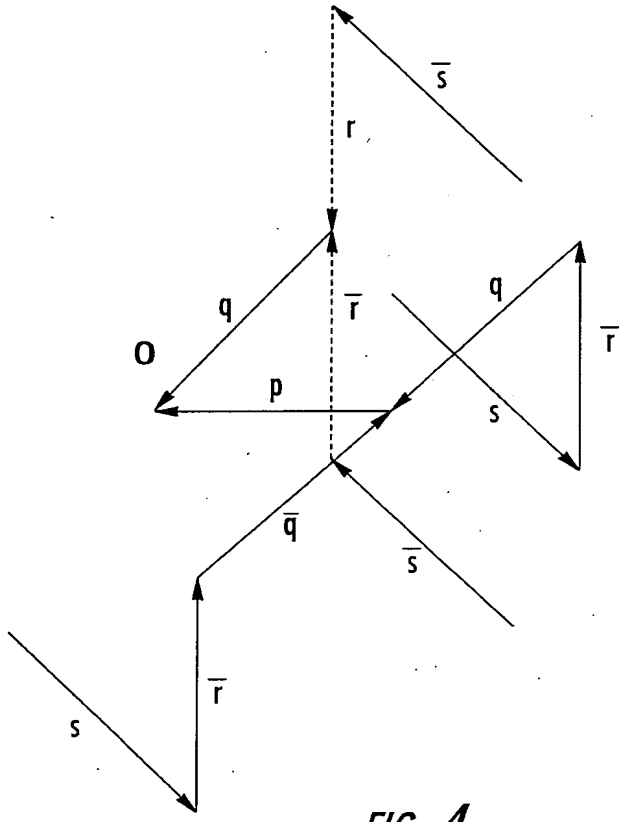

FIG. 4

Step 4

[-p(qr-s v q-r-s)] v p-q-rs v {p[q(r-s v -r-s v –rs]}

Repeat Steps 2 and 3 for the r, -r couple

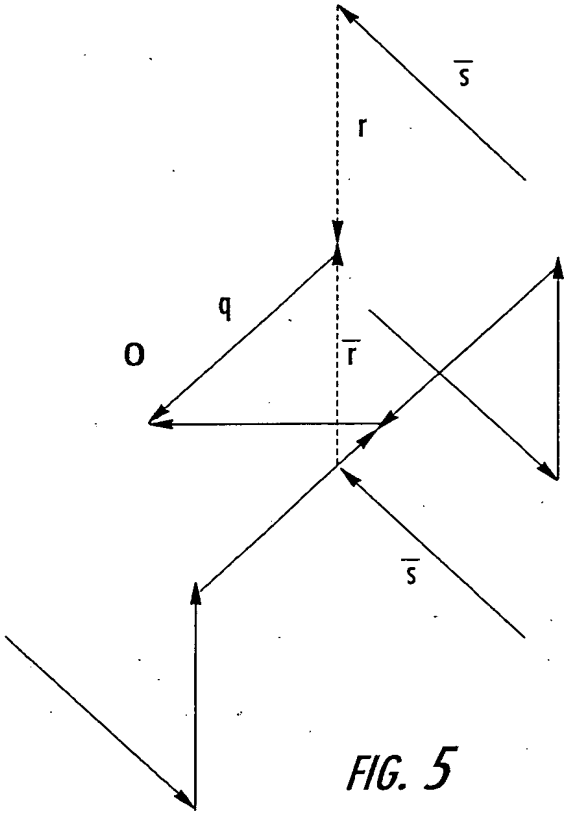

FIG. 5

Results of Step 4
[-p(qr-s v q-r-s)] v p-q-rs v {p[q(r-s v -r-s v –rs]}

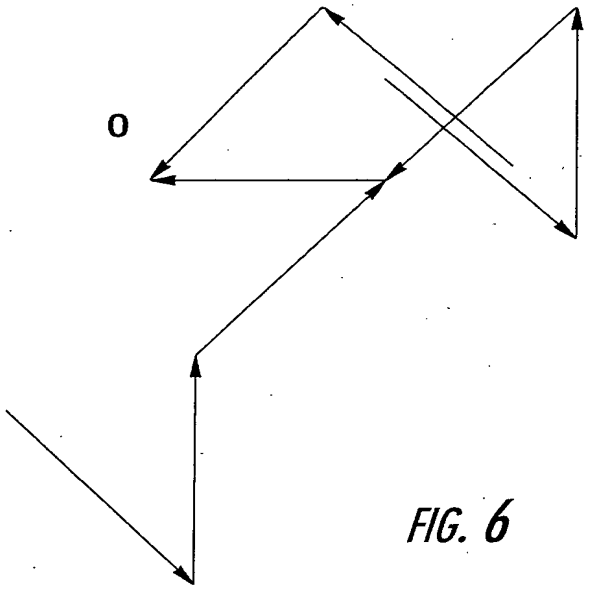

FIG. 6

Step 5

[-p(qr-s v q-r-s)] v p-q-rs v {p[q(r-s v -r-s v –rs]}

Repeat Steps 2 and 3 for q, -q couple.

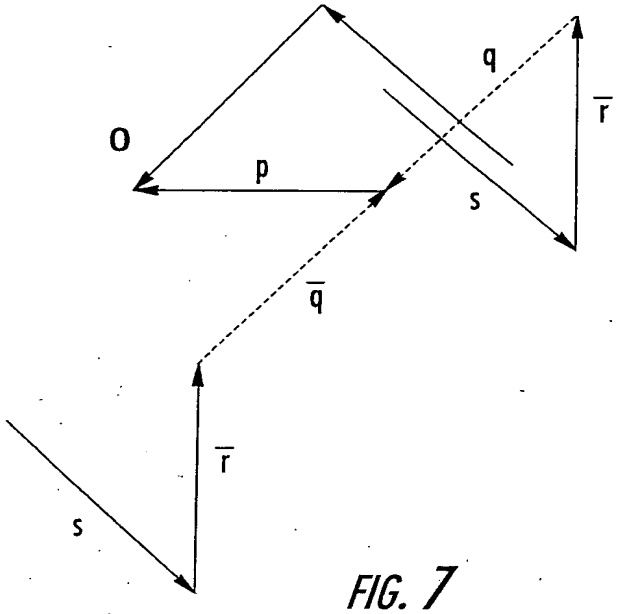

FIG. 7

Diagram 7

[-p(qr-s v q-r-s)] v p-q-rs v {p[q(r-s v -r-s v –rs]}

Resulting simplified logical expression is:

S*=q-s v p-rs

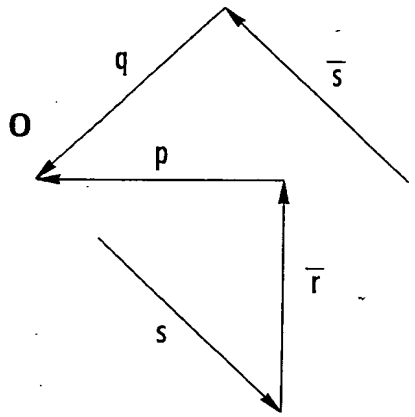

FIG. 8

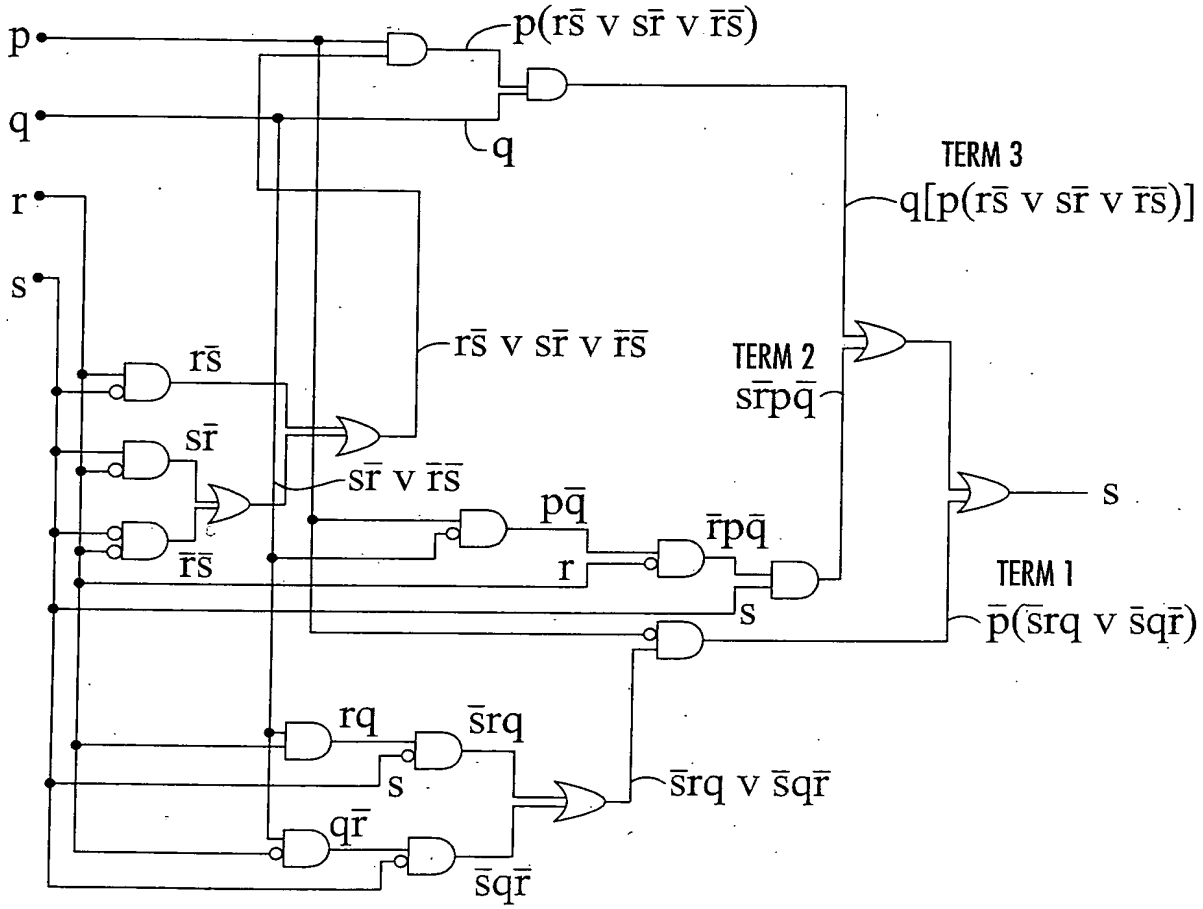

FIG. 9

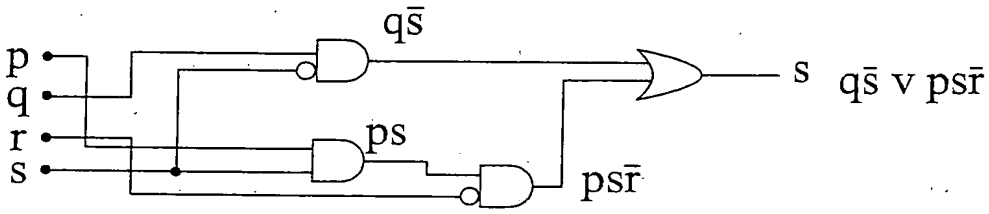

FIG. 10